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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re application of: | GREGORY, ET AL. |
| Serial No.: | 10/825,658 |
| Filing Date: | April 14, 2004 |
| Title: | METHOD FOR MAKING A TERMINATION FOR A WIRE ROPE FOR MINING EQUIPMENT |
| Examiner: | Kuang Y. Lin |
| Group Art Unit: | 1725 |

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

## SUPPLEMENTAL DECLARATION OF GEORGE GREGORY

1. My name is George Gregory. I am the inventor of the invention disclosed in the above-noted application. I am over 21 years of age, of sound mind and willing and able to make the following Declaration.

2. This Declaration is a supplement to my Declaration of February 12, 2007 filed in support of my patent application as identified above.

3. The *Mason* reference, United States Patent No. 3,901,610, discloses an invention to be used with cranes. Specifically, *Mason* shows at Figure 7 a perspective view of a crane jib. Figure 7 shows use of the terminal of *Mason* as an anchorage for the outgoing end of rope 14 multireeved on a crane jib 35. The socket of *Mason* is shown in use at 12. The arms 19 of the socket of *Mason* are integral with a sideplate 36 which is fixed to the crane jib (shown in Figure 8 and Figure 7).

4. The load placed on the anchorage for the rope multireeved on crane jib 35 is not high. For example, a 1000 horsepower crane (which is a large crane in the industry) might be capable of lifting up to 200 tons. However, as Figure 7 shows, the crane uses a series of snatch blocks (shown in the upper and lower portions of Figure 7) which drastically reduce the weight on any one rope because many passes of the rope are made between the two blocks. In this example, a 200 ton train (400,000 pounds) with two snatch blocks would use 8 ropes to lift this weight. Therefore, the weight on any one rope would be 50,000 pounds (400,000 divided by 8). The

swaged terminal and connector of *Mason* only connects 1 rope. Therefore, the swaged terminal and connector of *Mason* is only capable of lifting within the range of 50,000 pounds. This is far less than the mining industry requires.

5. Drag mining systems do not use snatch blocks or multireeved cables on drag ropes because the snatch blocks do not stand the wear and tear placed on them by multiaxial loading. More specifically, the crane only lifts a load vertically, where as a drag line system endures horizontal loading, vertical loading and loading side to side. The "side to side" loading occurs when the lift rope "swings" the bucket sideways to move the ore before dumping. The horizontal loading occurs as the bucket is dragged to collect ore. Because snatch blocks are not available, a single rope in a drag line system must endure the entire load. Furthermore, the single ropes of the drag line system must have connections which can withstand this direct loading.

6. The relatively light loading of a crane rope should be compared to drag lines used in the mining industry with drag buckets. Mining drag systems range from 30,000 to 60,000 horsepower (60,000 times greater than a crane). An average 60,000 horsepower drag line system therefore develops 2,000,000 pounds on a single rope. A physical swaging of the termination onto the rope in connection with a connector block would not withstand this loading. Therefore, the *Mason* reference does not disclose a termination capable of withstanding this loading and the termination disclosed in my application would not be obvious therefrom.

I declare under penalty of perjury that the foregoing is true and correct.

Date: Mar. 8-07

George Gregory